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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/957,465	09/21/2001	Ty Bordner	72167.000594	2588

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HUNTON & WILLIAMS LLP
INTELLECTUAL PROPERTY DEPARTMENT
1900 K STREET, N.W.
SUITE 1200
WASHINGTON, DC 20006-1109

EXAMINER

PADMANABHAN, KAVITA

ART UNIT	PAPER NUMBER
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2161

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/957,465	BORDNER ET AL.	
	Examiner	Art Unit	
	Kavita Padmanabhan	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,6,8-10,12-14 and 16-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,6,8-10,12-14,16-20 and 22-24 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 2-4, 7, 11, and 15 have been canceled.
2. Claims 1, 5, 6, 8-10, 12-14, 16, and 17 have been amended.
3. Claims 18-24 have been added.
4. Claims 1, 5, 6, 8-10, 12-14, and 16-24 are pending.
5. Claims 1, 5, 6, 8-10, 12-14, 16-20, and 22-24 are rejected.

Continued Examination Under 37 CFR 1.114

6. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/15/07 has been entered.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. **Claims 5 and 21** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

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art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 5 recites the limitation "said database includes names of parties approved for receiving certain goods. There does not appear to be support for this limitation in the applicant's original specification. The applicant has directed the examiner to par [0021], par [0023], and par [0024] of the specification as containing support for this limitation. However, there does not seem to be any mention in these paragraphs of the database including names of parties approved for receiving certain goods. In fact, it appears as though the database contains information on the restricted parties, i.e. the ones that are not approved for receiving certain goods.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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11. **Claims 1, 9, 10, 12-14, 16, 18, 19, 20, and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bohm et al.** (US 5,404,507, hereafter “Bohm”) in view of **Havens** (US 5,752,242).

In regards to **claim 1**, **Bohm** teaches a method for comparing a query against data contained within a database comprising the steps of:

- (a) receiving said query (**col. 6, lines 27-29**);
- (b) extracting a plurality of attributes from a plurality of potential match areas from said query (**col. 6, lines 27-33, where a target word is interpreted to be an “attribute” and each input field is a potential match area**);
- (c) converting said plurality of attributes from said query, using at least one linguistic pattern matching analytical tool (**col. 4, lines 30-37, abbreviations; col. 5, lines 19-20, trigrams**), into a plurality of linguistic pattern strings (**Fig. 3, ref characters 303 and 304; col. 3, lines 48-53, 57-60; col. 5, lines 60-65; col. 6, lines 27-33, 39-42, 49-52, where the search expression is interpreted to be a “linguistic pattern string”**);
- (d) comparing said plurality of linguistic pattern strings with at least one stored linguistic pattern string from at least one stored attribute contained within said database for providing a set of matches (**col. 3, lines 61 – col. 4, line 8; col. 5, lines 9-11; col. 6, lines 27-52, 65-68; col. 7, lines 29-34**);
- (e) analyzing said set of matches, using said at least one linguistic pattern matching analytical tool, to provide at least one set of matched attributes (**col. 7, lines 8-11, 15-28, 36-39**);

- (f) combining all of said at least one set of matched attributes to provide a combined result (**col. 6, lines 66-68; col. 7, lines 8-28**); and
- (g) wherein at least one of the actions of receiving, extracting, converting, comparing, analyzing, and combining is implemented using at least one data processing system (**Bohm; Fig. 1**).

Bohm does not expressly teach the comparing step *using at least one user selectable index property*.

Havens teaches the use of user-selectable and modifiable search parameters/properties (**Havens; col. 3, lines 55-65; col. 6, lines 25-57; col. 9, line 62 – col. 10, lines 20**).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement the method of Bohm using user-selectable search properties, as taught by Havens, in order to provide more desirable search results to the user.

In regards to **claim 18**, **Bohm and Havens** teach the method of claim 1, wherein said plurality of potential match areas are user selectable (**Havens; col. 3, lines 55-65; col. 6, lines 25-57; col. 9, line 62 – col. 10, lines 20**).

In regards to **claim 19**, **Bohm and Havens** teach the method of claim 18, wherein said at least one linguistic pattern matching analytical tool used for converting has characteristics at least some of which are user selectable (**Havens; col. 3, lines 55-65; col. 6, lines 25-57; col. 9, line 62 – col. 10, lines 20**).

In regards to **claim 20, Bohm and Havens** teach the method of claim 19, wherein said comparing is by edit distance (**Bohm, col. 6, lines 7-14**).

In regards to **claim 22, Bohm and Havens** teach the method of claim 19, further comprising the step of filtering said combined result according to at least one user selectable criteria (**Havens; col. 3, lines 55-65; col. 6, lines 25-57; col. 9, line 62 – col. 10, lines 20**).

Claim 9 is rejected with the same rationale as given for claim 19, and **Fig. 1 and col. 2, line 47 – col. 3, line 28 of Bohm**.

In regards to **claim 10, Bohm and Havens** teach the method of claim 9, further comprising at least one filtering tool accessible to said central processing unit for filtering said combined result according to at least one user selectable criteria (**Havens; col. 3, lines 55-65; col. 6, lines 25-57; col. 9, line 62 – col. 10, lines 20**).

In regards to **claim 12, Bohm and Havens** teach the method of claim 9, wherein said at least one linguistic pattern analytical tool is comprised of at least one of a Metaphone based analysis, a Phonex based analysis, a Soundex based analysis, an N-gram based analysis (**Bohm, col. 5, lines 41-50**), an edit-distance based analysis (**Bohm, col. 6, lines 7-14**) and a dictionaries based analysis (**Bohm, col. 3, line 57 – col. 4, line 14**).

Claims 13, 14, and 16 are rejected with the same rationale given for claims 19, 10, and 12, respectively.

12. **Claims 5, 6, and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bohm** in view of **Havens**, further in view of **Millard et al.** (US 2002/0007335, hereinafter "Millard").

In regards to **claim 5**, **Bohm and Havens** teach the method of claim 19, wherein:

- said query includes a party's name (**Bohm; col. 3, line 61 – col. 4, line 2; col. 4, lines 56-57**).

Bohm and Havens do not expressly teach said database including names of parties approved for receiving certain goods.

Millard teaches approving buyers and maintaining buyer registration information (**Millard; claim 27**).

It would have been obvious at the time of the applicant's invention to implement the method of **Bohm and Havens** using the approved buyers information taught by **Millard** in order to ensure that the customers of **Bohm and Havens** are approved to receive the products for which they are searching.

In regards to **claim 6**, **Bohm, Havens, and Millard** teach the method of claim 5, further including the step of filtering said combined result according to at least one user selectable criteria (**Havens; col. 3, lines 55-65; col. 6, lines 25-57; col. 9, line 62 – col. 10, lines 20**).

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In regards to **claim 8, Bohm, Havens, and Millard** teach the method of claim 6, further comprising the step of employing at least one of a Metaphone based analysis, a Phonex based analysis, a Soundex based analysis, an N-gram based analysis (**Bohm, col. 5, lines 41-50**), an edit-distance based analysis (**Bohm, col. 6, lines 7-14**) and a dictionaries based analysis (**Bohm, col. 3, line 57 – col. 4, line 14**).

13. **Claim 17 and 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Bohm** in view of **Havens**, further in view of **Wheeler et al.** (US 6,618,727, hereafter “Wheeler”), and further in view of **Lambert** (US 6,529,892).

In regards to **claim 23, Bohm and Havens** teach the method of claim 19, and also teach different types of N-gram based analyses (**Bohm, col. 5, lines 41-50**), an edit-distance based analysis (**Bohm, col. 6, lines 7-14**), and a dictionaries based analysis (**Bohm, col. 3, line 57 – col. 4, line 14, where “dictionary” is defined by The American Heritage College Dictionary, Fourth Edition, as “A list of words stored in machine-readable form for reference, as by spelling-checking software.”**).

Bohm and Havens do not expressly teach a Metaphone based analysis, a Phonex based analysis, and a Soundex based analysis.

Wheeler teaches a Metaphone based analysis and a Soundex based analysis (**Wheeler, col. 11, lines 30-38**).

Lambert teaches a Phonex based analysis (**Lambert, col. 24, line 42 – col. 25, line 11**).

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It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to apply the metaphone and soundex based analyses disclosed in Wheeler and the phonix based analysis disclosed in Lambert with the search method of Bohm and Havens to gain the advantage of improved search intelligence by incorporating sound-based analyses (**Bohm, col. 1, line 65 – col. 2, line 2; Wheeler, col. 11, lines 30-38; Lambert, col. 24, line 42 – col. 25, line 11**).

Claim 17 are rejected with the same rationale as given for claim 23.

14. **Claim 24** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Bohm** in view of **Havens**, further in view of **Dey et al.** (US 6,757,866, hereafter "Dey").

In regards to **claim 24**, **Bohm and Havens** teach the method of claim 19.

Bohm and Havens do not expressly teach designating, *responsive to a match candidate containing an unusual word in an unusual words dictionary*, said match candidate to be a match.

Dey teaches words that are considered rare, i.e. unusual, being more indicative of a match than common words (**Dey; col. 15, lines 40-53**).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to apply the unusual word analysis disclosed in Dey with the search method of Bohm and Havens to gain the advantage of improved search intelligence.

Allowable Subject Matter

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15. **Claim 21** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

16. Applicant's arguments filed 3/15/07 with respect to the prior art rejections of the claims have been fully considered but they are not persuasive.

Applicant argues at page 10 of applicant's remarks that Bohm does not teach extracting attributes from match areas and then converting those attributes to linguistic pattern strings compared to the database being searched. Rather, the applicant argues that Bohm merely teaches that search terms can be expanded to include common misspellings, acronyms, and the like. The examiner respectfully disagrees with the applicant's argument. The examiner asserts that Bohm teaches extracting target words, i.e. attributes, from input fields, i.e. match areas (col. 6, lines 27-33), converting them into search expressions, i.e. linguistic pattern strings (col. 3, lines 48-53, 57-60; col. 5, lines 60-65; col. 6, lines 27-33, 39-42, 49-52, that are used to search a database (col. 3, lines 61 – col. 4, line 8; col. 5, lines 9-11; col. 6, lines 27-52, 65-68; col. 7, lines 29-34). Moreover, the examiner asserts that even applicant's limited interpretation of Bohm's teachings, search terms that are expanded to include common misspellings, acronyms, and the like, appears to meet the limitations of the claim being argued, as presently written.

In response to applicant's argument at page 16 of applicant's remarks that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed

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invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves *or in the knowledge generally available to one of ordinary skill in the art*. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation can be found not only in the knowledge generally available to one of ordinary skill in the art, but also in the references themselves (Bohm, col. 1, line 65 – col. 2, line 2; Wheeler, col. 11, lines 30-38; Lambert, col. 24, line 42 – col. 25, line 11).

The remainder of applicant's arguments with respect have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kavita Padmanabhan** whose telephone number is **571-272-8352**. The examiner can normally be reached on Monday-Friday, 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kavita Padmanabhan
Assistant Examiner
AU 2161

May 25, 2007

KP.



ETIENNE LEROUX
PRIMARY EXAMINER